FAA Significant Regulatory Differences

Amendment Pair: 14 CFR Part 25 Amendment 25-113
JAR 25 Change 16/ CS-25

Background:

This SRD list was developed from the Amendment 25-87 SRD list, with changes as required to account for the later amendments. An itemized listing of the effect of Amendments 25-88 through 25-113 and JAR Change 16 is documented in a separate file assess.doc.

General Comments and Assumptions:

This following list of SRD regulations which require direct FAR compliance is based on the FAR/JAR 25 Amendment pair noted in the header.

1. This SRD list includes only regulations where compliance with the JAA minimum standard would not be accepted by the FAA. (NOTE: The SRD list is identified as the "FAA-SRD" list to clarify that it is only intended for FAA validations of JAA products).

2. According to the "Type Validation Principles", only regulations that have a regulatory difference will be included in the SRD list. Identical regulations that have differences in guidance/interpretive material will be addressed, if required, as separate Validation Items (VI).

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FAR Sections	Guidance	Remarks
Subpart B		
25.107(e)(1)	AC 25-7	FAR requires greater margin of VLOF over VMU than JAR for airplanes that are geometry-limited or elevator power-limited
Subpart C		
25.307(a)		Difference in judgment and practice. Sometimes FAA requires limit tests while JAA accepts analysis, other times JAA requires ultimate load tests while FAA accepts limit tests.
25.361(b)		The FAA does not accept the 3 sec spindown allowed by ACJ to determine limit engine torque
25.361(c)		Total propeller malfunction dynamic factor is different between FAR and JAR.
25.365		FAR includes structural design considerations for operation above 45,000 feet.
25.562(b)		FAR applies to all seats; JAR applies to pax seats only.
25.571(b)		FAR requires special consideration of widespread fatigue damage (WFD) and verification by full-scale fatigue test that WFD will not occur. JAR includes provisions for using residual strength loads less than limit.
25.571(e)	AC 25.571-1A AC 20-128	FAR requires consideration of uncontained rotor and fan damage to structure not limited to pressurized compartments
Subpart D		
25.613(c)		FAR requires evaluation of impact due to environmental conditions including moisture. JAR only requires temperature.
25.621		FAR rule more specific and generally more stringently applied.
25.631		FAA rule requires 8 pound bird on tail, so is more severe.
25.671(c)(1)		The more stringent FAA requirement mandates single failures regardless of probability.
25.807		FAR includes asymmetry, uniformity, and location requirements; revisions to type and number requirements.
25.810		FAR includes more stringent erection times for escape slides.
25.813		JAR 25.813 does not include the standards of FAR 25.813(c) concerning access to Type III exits in airplanes with 60 or more passengers. FAR (a)(1) and (a)(2) include requirements for two or more aisles.
25.831(a)	AC 25-20	FAR has different cabin ventilation requirements.
FAR Sections	Guidance	Remarks

25.831(g)		Unique FAR requirement for temperature exposure time requirements.
25.841	AC 25-20	FAR establishes cabin pressure altitude requirements
25.855(c)		Compliance with JAR, which allows class D cargo compartments, may result in non-compliance with FAR.
25.856		New FAR requirement. No equivalent JAR
25.857(d)		Compliance with JAR, which allows class D cargo compartments, may result in non-compliance with FAR.
25.858		FAR includes applicability to baggage compartments and smoke detection systems
Subpart E		
25.901 (c)		The FAA requires the fail-safe concept - no failure(s) will jeopardize the safe operation of the airplane. JAR requires compliance with JAR 25.1309. FAR includes the "fail-safe" requirements as part of the rule in 25.901. Fail-safe is applied by guidance in 25.1309 and is therefore not mandatory by 25.1309.
25.901(d)		The FAA requires that the APU installation meet the applicable provisions of subpart E (application of engine installation requirements). JAA has clearly defined requirements in JAR-25 subpart J.
25.963(e)	AC25.963-1	FAR requires fire resistant access panels. AC defines 30 deg. tire debris zone. ACJ defines 15 deg. ACJ defines more potentially critical tire energy conditions.
25.981	AC 25.981-1B AC 25.981-2	FAR includes fuel tank ignition prevention & flammability requirements that differ from the JAR.
25.1093	AC20-73; Policy memo dated 8/3/1992	FAA requires demonstration of capability to operate the engine and essential APU under the conditions of falling and blowing snow. FAA has issued policy memorandum dated August 3, 1992 regarding conditions that must be considered.
Subpart G		
25.1529		FAR includes requirements in Appendix H25.4 to include in the ALS inspections and limitations for the fuel system. Also, FAR H25.4 refers back to 25.571 which is an SRD.